

Date: Thu, 4 Feb 93 07:38:12 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #167
To: Info-Hams

Info-Hams Digest Thu, 4 Feb 93 Volume 93 : Issue 167

Today's Topics:

2 meter HT amplifiers
80M HT9s
Call for Votes - Callsign Database CD's
Hammalund SP-600JX-17
Help! Roanoke Doppler Direction Finder
ht bnc connectors
Mail failure (2 msgs)
Mods for Kenwood 731
No RFI to 1986 Toyota Camry & Celica
Proposition
QRP amplifier ?
QRP Mobile
Real NoCodes

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 4 Feb 93 00:26:18 GMT
From: pa.dec.com!engage.pko.dec.com!nntpd.lkg.dec.com!nntpd2.cxo.dec.com!
nuts2u.enet.dec.com!little@decwrl.dec.com
Subject: 2 meter HT amplifiers
To: info-hams@ucsd.edu

kayd@prism.CS.ORST.EDU (Kayd) writes:

>What is a good source for kit or pre-built 20-30 watt 2m amps? I'm thinking
>of putting something together for my mobile and have not been able to find

>anything in the cheap to affordable parts of the spectrum...

The August 1988 QST has an inexpensive 25 watt amp construction project in it.

73,
Todd
N9MWB

Date: Wed, 3 Feb 1993 15:23:36 GMT
From: usc!zaphod.mps.ohio-state.edu!cis.ohio-state.edu!udecc.engr.udayton.edu!blackbird.afit.af.mil!jmillier@network.UCSD.EDU
Subject: 80M HT9s
To: info-hams@ucsd.edu

In article <".1-Feb-93.13:34:58.CST".*.Dan_Scully.houstoncssc@Xerox.com> ds.HoustonCSSC@xerox.com writes:
>I'm trying to imagine a rubber duck on an 80M handie!
>

At Dayton last year, one of the antenna companies (think it was Larsen, but don't recall for sure) had a 40m rubber duck on display. Visualize something about the same proportions as a softball bat, except half as long and twice (maybe three times) the diameter.

I just about doubled up laughing when I saw it...the XYL (first time to a hamfest) just wrote it off as another example of hams' craziness.

The rep said it would load up on 40...imagine the massive efficiency :-)

73, Jeff

--
Jeff Miller, NH6ZW/N8, AFA1HE (ex WD6CQV, AFA8JM, AFA1D0)
AFIT School of Engineering, Wright-Patterson AFB, OH
"This class (Formal Methods in SW Engineering) redefines the term "auger in" -- nameless AFIT student. Help eliminate FOD in our lifetime.

Date: 3 Feb 1993 21:27:16 GMT
From: sun-barr!news2me.EBay.Sun.COM!west.West.Sun.COM!l1-a!flloyd@ames.arpa
Subject: Call for Votes - Callsign Database CD's
To: info-hams@ucsd.edu

It's been over 6 months since the last Callsign project and so it

seems like a good time to start thinking about an update. This time, however, we're thinking about producing a CD-ROM!

The proposed CD-ROM would contain the complete callsign database, several indexes to it, DOS and UNIX search and retrieval programs, a good collection of ham radio shareware, and very likely a copy of the FCC rules. The disc would be produced in the standard ISO 9660 format. The end user cost would be \$24.95 per disc.

What I'm asking for at this time is are general comments about this idea and a count of people who may be interested in a copy.

Please send me an e-mail indicating a) if you think this would be a good idea, and b) whether you might want a copy. In addition, any suggestions for extra features to include would be appreciated.

Note: We are taking no orders at this time. DO NOT SEND MONEY. I'm only asking if you might be interested in buying one. A 'yes!' response to the questionnaire will not obligate you to buy a CD if it became available.

So, let's hear it.... How many of you might be interested?

----- cut-n-mail -----

A. Is this a good idea? ☐ Yes ☐ No

B. Might you buy a copy? ☐ Yes ☐ No

C. Comments:

A summary of the responses will be posted within 2 weeks.

Please e-mail your response to fred.lloyd@west.sun.com

-fred

--

[Fred Lloyd, AA7BQ	Fred.Lloyd@West.Sun.COM]
[Sun Microsystems,	Southwest Area Solaris Transition Manager]
[Phoenix, AZ	(602) 275-4242]

Date: Wed, 3 Feb 1993 23:46:47 GMT
From: usc!howland.reston.ans.net!bogus.sura.net!darwin.sura.net!
mlb.semi.harris.com!news@network.UCSD.EDU
Subject: Hammalund SP-600JX-17
To: info-hams@ucsd.edu

Greetings all..

I'd like to get some opinions on the Hammalund SP-600JX-17. I have a chance to purchase a MINT one for \$400. I have a money back guarantee if the unit is not mint. So anyway is this unit in mint condition worth the \$400?

Thanks,
Ray

Date: Wed, 3 Feb 1993 23:25:57 GMT
From: saimiri.primate.wisc.edu!zaphod.mps.ohio-state.edu!usc!rpi!utcsri!skule.ecf!
chengr@ames.arpa
Subject: Help! Roanoke Doppler Direction Finder
To: info-hams@ucsd.edu

I'm trying to build a Doppler Direction Finder, to work on the FM band (88--108 MHz). I've got plans from a book, Transmitter Hunting: Radio Direction Finding Simplified by Joseph D. Moell, K00V, and Thomas N. Curlee, WB6UZZ.

Has anyone ever built the Roanoke Doppler DF described in that book? Just how hard is it to build, anyways?

I'm trying to build one for a design project. I'd like to be able to track a pulsed transmitter. My plan is to put a CPU on the thing, and an electronic compass. That way, when the transmitter is not active, I can still track the bunny based on the last bearing.

I'm going to use a commercial FM receiver. Is there any way to get an FM detect/low level signal off the thing, so that the display locks when the bunny stops transmitting? (It's pulsed, remember). How fast would it be? If I used the FM detect to "gate" the Doppler DF, would it still lock onto a 25ms pulse?

What happens if the bunny's not the only thing transmitting at that frequency? I'm considering a pulse "signature" which the CPU could recognize, so that the DF wouldn't point to a distant radio station as soon as the bunny went off the air.

I have many questions to ask, especially since I've never built an RF circuit in my life. (Of course, the Doppler DF isn't RF, it's an audio cuircuit.)

But my MAIN question is how hard is it. My design professor thinks it's too hard. I have 7 weeks to build the thing. I'd appreciate hearing from anyone who's built the thing, especially in the Toronto region.

I HAVE built electronic projects before, but mostly digital computer interface ones.

Please email your responses! If you post, I will miss it! I will post a summary if there is enough interest.

Thanks in advance.

--

...Cheng

chengr@ecf.utoronto.ca

Date: Wed, 3 Feb 1993 23:04:22 GMT
From: pacbell.com!sgiblab!zaphod.mps.ohio-state.edu!cs.utexas.edu!convex!constellation!essex.ecn.uoknor.edu!usenet@network.UCSD.EDU
Subject: ht bnc connectors
To: info-hams@ucsd.edu

In article <9302021416.AA06788@ucsd.edu> jds@emclab.ATt.COM writes:

>

>

>here's an easy one...

>

>My colleague and I have the same problem with two different ht's...

>(Icom 24AT and Kenwood TH78)...Seems the bnc connector rotates a bit,

>about 10 degrees. I hadn't noticed this until a few days ago while

>removing the duck for connection to the mobile antenna. Then I said

>ahhh! that's not right!

>

>The two questions are: 1) by the fact that the bnc has been rotating

>slightly for some small period of time indicate that the solder joints

>on the other side have loosened? (this is dependent whether the shell

>can rotate arround the stationary "core" center conductor of a bnc jack)

>
>2) I notice a nut with two grooves holds the bnc in place...is there a
>source for the tool to tighten this type of nut? (Amphenol/AMP/Kings?)
>I used a needle nose for a temporary fix, but that didn't seem to get
>it tight enough. The pliers twist and then gouge your hand when they slip,
>but that would never happen to me!
>
Stuff deleted...

I had the loose BNC problem with my Icom 24AT. I put some epoxy around the base of it, after tightening it. The epoxy dried clear, so it barely shows. I know it will make it tough to take off later, but maybe a truck will hit me before then, and in the mean time I won't have been cursing every time I changed antennas! :)

```
+-----+
| Jud Ahern KC5RI           Bitnet: jahern@uokgcn.bitnet       |
| Geology & Geophysics      Internet: jahern@geohub.gcn.uoknor.edu |
| University of Oklahoma    "Opinions expressed here reflect the entire|
| Norman, OK 73019          University, in one convenient location." |
+-----+
```

Date: Wed, 3 Feb 93 22:47:37 GMT
From: mentor.cc.purdue.edu!noose.ecn.purdue.edu!en.ecn.purdue.edu!n9ljx@purdue.edu
Subject: Mail failure
To: info-hams@ucsd.edu

Looks like another line in the KILL file. Can this be fixed??

--sas
--

Scott Stambaugh - N9LJX internet: n9ljx@ecn.purdue.edu
Operations Supervisor, ADPC phone: 317 494 7946
Purdue University
West Lafayette, IN 47907-1061

Date: 4 Feb 93 18:05:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: Mail failure
To: info-hams@ucsd.edu

[002] Mail was received that was addressed to the following unknown addresses:
PAYLOADS/ALPINEVALL/MCCASKEYA

Return-Path: <info-hams@ucsd.edu>
From: info-hams@ucsd.edu
Message-Id: <9302041503.AA28951@plkmail>
Date: Thu, 4 Feb 93 04:30:00 EDT
To: MCCASKEYA%ALPINEVALLEY@3mail.ksc.nasa.gov
Subject: Info-Hams Digest V93 #166

Info-Hams Digest Thu, 4 Feb 93 Volume 93 : Issue 166

Today's Topics:

 ham fest in Utah
 No-codes
 UK call signs

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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policies or positions of any party. Your mileage may vary. So there.

Date: 3 Feb 1993 21:48:46 GMT
From:
usc.edu!sol.ctr.columbia.edu!hamblin.math.byu.edu!usenet@network.UCSD.EDU
Subject: ham fest in Utah
To: info-hams@ucsd.edu

For local hams and prespective hams in Utah

We are going to the ham fest in SLC utah on the second sat of this month.

Any info contact local ham or me.

thnx your time:

n7uqj

Date: 3 Feb 93 20:46:54 GMT

From:

usc.edu!howland.reston.ans.net!spool.mu.edu!news.nd.edu!mentor.cc.purdue.edu!no
oose.ecn.purdue.edu!dynamo.ecn.purdue.edu!wb9omc@network.UCSD.EDU

Subject: No-codes

To: info-hams@ucsd.edu

[parts deleted]

>Your argument is that a test should be made difficult so the test taker
>values the effort required to pass the test. I can't agree for two
>reasons.

>The other reason I can't agree with your argument is that I don't believe
>it is the government's job to make me value my amateur privileges or my
>accomplishment in achieving some license class. If I value them, I'll do
>what's necessary to maintain them, but putting up arbitrary road blocks is
>certainly something I wouldn't advocate the government doing. It's already

>Besides, even if you feel the government should be my motivator, why
>motivate me to learn Morse code? Certainly there must be other things I
>can do that would be of greater value to me and the amateur community than
>learn Morse code. Think of how much we could push the state of the art if
>we required potential amateurs to push the state of the art. Or perhaps
>you feel 20 WPM is state of the art?

>Besides, if learning Morse code really requires the sacrifice you imply
>based upon the value it instills, can't we use that effort for better
>things? The potential is staggering. If it takes the average amateur 50
>hours of effort to go from 5 WPM to 13 WPM and 100 hours to from 5 WPM to
>20 WPM (I made these up, pick your own favorite numbers) and we have
>230,000 advanced and general class amateurs and 60,000 extra class
>amateurs, that's 8,500 person-years expended on learning Morse code. Is
>learning Morse code really worth 8,500 years of effort? Think of the
>things that could be done with that kind of effort? Fund raising for
>AMSAT, fund raising for a PAC to help protect our bands, teaching
>electronics to under privileged children, or who knows what else. 8,500
>years is a *LOT* of effort and I didn't even include the time for probably
>some 450,000 amateurs to learn their initial 5 WPM.

>73,
>Todd
>N9MWB

Todd, couldn't agree with you more. By your call, I'd guess you
were licensed within about the last 1 1/2 years, right?

I think you'll find that a lot of the OF's (Old Fart's) are quite

hidebound in their beliefs that CW separates the men from the boys in Amateur Radio.

In the first club I was in, most of the old timers didn't even want to come to the meetings anymore because they felt that the club was being taken over by "those dang repeater users". They were opposed to spending money for repeater improvements because they felt like the money should be left in the bank for "future use". Like what? us young hams replied, you guys haven't done s**t in 15 years, according to the back minutes of the meetings.....

Never mind that the officers of the club were also OF's. Us young guys were just pushing some progress. :-)

OK, that was nearly 20 years ago. I've been licensed for 19 years (this May) and I suppose that qualifies me in some respect as an OF. However, I have never been one of the hidebound brass freaks that some of my peers are.

If THEY want to use the key, that is fine. Don't expect that everyone else in Amateur Radio enjoys it or wants to do it. *I* don't.

And I agree that the time has come for CW to cease being the standard by which all hams are measured. The FCC has given us NO-code Technician, it is here, it is a fact, and all the sour grapes in the world coming from some of my fellow OF's don't change that.

One of my major arguments in favor of no-code was that in the face of increasing pressure on our spectrum allocations, we had better expand our hobby in terms of sheer numbers of people. Congresscritters understand two things: cash and re-election. If you got enough people in your hobby to wield lots of votes, you stand a better chance of having some influence. And influence is what will keep spectrum, NOT a bunch of purists keeping people OUT of the hobby.

Duane
WB9OMC

Date: 3 Feb 93 09:51:22 GMT
From: agate!doc.ic.ac.uk!warwick!pipex!Q.icl.co.uk!dsbc!ozz!prs@ames.arpa
Subject: UK call signs
To: info-hams@ucsd.edu

In article <1993Jan31.024827.17622@thunder.mcrcim.mcgill.edu>,
control3@McRCIM.McGill.EDU (Mark Readman) writes:

>

> I would like to know the call signs currently in use in
 > UK. What should I be listening for on HF. Is it
 > always G3 etc. I was just wondering because the ARRL
 > handbook gives several prefixes other than G for the UK.
 >

Full G Calls += blank England
 M Scotland
 W Wales
 I Northern Ireland
 D Isle of Man
 U Guernesy
 J Jersey

Club G Calls += X England
 (optional prefix S Scotland
 used when passing C Wales
 3rd part greetings) N Northern Ireland
 T Isle of Man
 P Guernesy
 H Jersey

Class A (HF+VHF/UHF) G0 G2 G3 G4
 GM0 GM2 GM3 GM4
 GW0 GW2 GW3 GW4 etc
 plus all 1x2 and 2x2 pre-war calls, eg G5QQ GM5QQ

Class B (VHF/UHF only) G1 G6 G7 G8
 GM1 GM6 GM7 GM8
 GW1 GW6 GW7 GW8 etc

Additionally GB calls are special and come as class A and class B.

Novice 2 Calls += as Full G Calls except E England

Class A (HF+VHF/UHF) 2E0 2M0 2W0 etc
 Class B (VHF/UHF only) 2E1 2M1 2W1 etc

73 Peter G0 PUB

 --... ..-- -... . --. ----- .--. ...- -... -.-
 Peter Swynford is available... tel: +44 344 424842 x 2625 / Bracknell 424842
 or at prs@oasis.icl.co.uk /...!uunet!mcsun!ukc!iclbra!prs / G0PUB@GB7RDG.GBR.EU
 Disclaimer: See Paragraph 2.4.a of section 1.a (article 7) (iii) of the
 Town and Country Planning Act, 1967.

End of Info-Hams Digest V93 #166

Date: Fri, 29 Jan 1993 15:20:57 GMT

From: agate!usenet.ins.cwru.edu!howland.reston.ans.net!usc!cs.utexas.edu!oakhill!
spud!geraldg@ames.arpa

Subject: Mods for Kenwood 731

To: info-hams@ucsd.edu

I recently installed a Kenwood 731 in my car and I'm having a blast with the rig. I wish it had a few more memory locations (especially for the 2m side) but otherwise it's a great rig.

I'm looking for any modifications that I can perform such extend receive range, etc.; I can't ftp from my location, so please let me know where I can receive such information via email. Thanks!

73,

Gerald

Gerald W. Garcia, P.E. N5UMB
Senior Design Engineer
geraldg@spud.sps.mot.com
(512) 891-2806 (voice)

Motorola Inc., MD: TX30/OE37
6501 Wm. Cannon Dr. West
Austin, TX 78735-8598
(512) 891-8315 (fax)

Date: 4 Feb 93 15:17:00 GMT

From: news-mail-gateway@ucsd.edu

Subject: No RFI to 1986 Toyota Camry & Celica

To: info-hams@ucsd.edu

Just another data point...

I own two 1986 Toyotas, a Camry and a Celica GTS. Both have Icom IC-25As installed in the console, powered from the cigarette lighter circuit (hardwired to the feed, not through one of those cheap plugs). Antenna in both cars is a Larson NMO mount in a hole centered in the roof, with the coax running down the windshield corner post. Radios were installed in the Camry in 1987 and the Celica in 1988. They're almost always run at the 25W output setting.

RFI in the Camry has been nonexistent, except for a weak Camry-generated carrier on 147.01. The Celica's computer controlled heating system

sometimes changes fan speed from high to low when I transmit in that car. All in all, I have no complaints.

73
Pete

```
=====
Peter Simpson, KA1AXY                      Peter_Simpson@3com.com
3Com Corporation                          (617) 466 9702
1000 Winter Street, Suite 4900             Waltham, MA 02154
=====
```

Date: Thu, 4 Feb 1993 01:05:46 GMT
From: saimiri.primite.wisc.edu!zaphod.mps.ohio-state.edu!swrinde!gatech!concert!
samba!usenet@ames.arpa
Subject: Proposition
To: info-hams@ucsd.edu

My biggest gripe with the current license structure:

No code Tech's should be given access to some Novice CW only bands.
Where else are they supposed to practice the code? 2m? I have had the
2m CW stuff in my scanner for quite some time and have heard NOTHING.
It just makes good sense to give n-coders a place to practice their code.

-ks
KD6RCT

--

The opinions expressed are not necessarily those of the University of
North Carolina at Chapel Hill, the Campus Office for Information
Technology, or the Experimental Bulletin Board Service.
internet: laUNCHpad.unc.edu or 152.2.22.80

Date: 3 Feb 93 05:12:41 EST
From: gondor.sdsu.edu!newshub.sdsu.edu!usc!sdd.hp.com!ncr-sd!ncrcae!ncrhub2!
ncrgw2!psinntp!arrl.org@network.UCSD.EDU
Subject: QRP amplifier ?
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, gary@ke4zv.uucp (Gary Coffman) writes:
>That nice glow is a clear warning.

I wouldn't rely on it though, the B+ sometimes has a nasty habit of hanging around even after the tubes have cooled off.

>Yes, I've built transmitters like the one I described. A little bit
>of respect for Reddy Kilovolt is required, but they can be operated
>safely. I like to build this type of radio in a wooden box. A metal
>cabinet is tempting fate if your house wiring is polarized wrong.

Is this radio operated without a ground? Seems to me you would run into real problems if your house wiring was polarized wrong and you grounded it. This is why I tell people to never try and ground their TV sets. If it isn't, I'd sure hate to have someone grab the wrong end of a dipole. Yeah, I know people aren't suppose to do that, but...

>Yeah, but why would you want to build a no-tune amp and then have to
>add another box, an antenna tuner. Transmitters with tunable outputs
>are a much neater package. I like all the knobs in one box. If we
>run our 6L6 grounded grid(s), we have an input cap, a cathode choke,
>a plate tuning cap, the tank coil, and the swinging link. Looks like
>5 parts plus the tube. If we want more gain, we use it common cathode
>and add a screen dropping resistor, grid leak, and input LC circuit
>for a total of 9 parts plus the tube.

BTW, grounded grid doesn't automatically mean 50 ohm input impedance, though it does in special cases. If it did, what if you had two tubes in parallel instead of one?

I wouldn't use the filter caps as a tank coil bypass, though undoubtedly sort of works. I have found that most people who have to ask about simple circuits have trouble getting parts, particularly stuff like plate tuning capacitors and grid leaks.

There are suppliers in Chapter 35 of the ARRL Handbook, but it might make more sense to see if someone at a local radio club has them in their junk box. I gave much of that sort of stuff away, when I moved here, though I did keep the grid leaks, as they are actually useful for other purposes. Never owned a Mueller grid leak drip pan, however. :-).

>

>Circuit strays can be a problem at 10 meters and higher when using
>ordinary HF components, but at least tube gain doesn't increase
>exponentially with decreasing frequency. Trying to tame a VHF power
>transistor at HF is as hard as trying to tame a tube at VHF.
>When used where they were intended, they work well.

What are you trying to say, that tubes aren't intended to work at

VHF?! The Eimac 3-500Zs in the SB-220 are rated to 110 MHz with full ratings, according to the Eimac catalog. I always thought that if you want 1500 watts at VHF, you were better off using tubes.

The MRF 137 2 to 400 MHz transistor used in my May 1992 QEX broadband amplifier seems pretty stable. But, just to be sure, I swept filters with 5 watts of RF. Now, if we just had a stable 1500 watts that didn't care about the load SWR for sweeping filters ...

I call 1.8 to 54 MHz broadband. It wasn't worth the work to cover 148 or 222 MHz, in my opinion. Someone up to the challenge? It does require a 28 volt supply, so you would need a switching supply to run it off 12 volts.

Zack Lau KH6CP/1

Internet: zlau@arrl.org "Working" on 24 GHz SSB/CW gear
Operating Interests: 10 GHz CW/SSB/FM
US Mail: c/o ARRL Lab 80/40/20 CW
225 Main Street Station capability: QRP, 1.8 MHz to 10 GHz
Newington CT 06111 modes: CW/SSB/FM/packet
amtor/baudot
Phone (if you really have to): 203-666-1541

Date: 3 Feb 93 17:48:33 EST
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa
Subject: QRP Mobile
To: info-hams@ucsd.edu

In article <1993Feb3.205329.23882@news.ysu.edu>, ag821@yfn.ysu.edu (Jeff Gold) wrote:

> The point is this happens every day. I live 7 miles from
> work and usually make one cw contact on my way into work
> and one on the way home.

Jeff-

I have quite a bit more power in my mobile rig, and carry an old plastic-based key along. However, it is rather clumsy to operate CW. I'm curious how you have your key set up. Is it a paddle-operated key, or is it a straight key? How do you have it mounted?

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

Date: 3 Feb 93 23:30:49 GMT
From: eram!dave@midway.uchicago.edu
Subject: Real NoCodes
To: info-hams@ucsd.edu

In article <1993Feb1.003015.26784@progress.com>,
damelio@progress.COM (Stephen D'Amelio) writes:

| I'm not a ham, but the VP of my department is. And
| YES he does business with your company. Oops, used to.
| You may have to explain why your company lost our business.
| (actually it's one of our VAR's that is your customer)

As they say in one of the USENET guides, be careful of what you
write, because your future (or current, for that matter) employer
may be reading it...

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC
dave@esi.COM.AU ...munari!esi.COM.AU!dave

Date: 3 Feb 93 18:19:38 GMT
From: usc!howland.reston.ans.net!spool.mu.edu!olivea!mintaka.lcs.mit.edu!micro-
heart-of-gold.mit.edu!xn.ll.mit.edu!ll.mit.edu!wjc@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993Feb2.005209.6906@netcom.com>, <C1tyA1.8nC@cmptrc.lonestar.org>,
<1993Feb2.234614.26212@kodak.kodak.com>
Subject : Thanks Barry!

In article <1993Feb2.234614.26212@kodak.kodak.com>, ornitz@kodak.kodak.com (Barry
x24904/ER/167B-TED) writes:

|
| ... lots of stuff deleted ...
|
| What about the plasticizers used in the vinyl seats the
| patrolmen sit in all day (these are often phthalates with an internal benzene-
| like structure)? These plasticizers are what coat your windshield and make it
| greasy when you park your car in the hot sun.
|
|
|

I've wondered for years about the source of that greasy junk on my car windows!

Thanks for this bit of information.

73

Bill Chiarchiaro N1CPK
wjc@ll.mit.edu

End of Info-Hams Digest V93 #167
